Land Capability Classification

The land capability classification system is used to show, in a general way, the suitability of soils for cropland. It is a three-category interpretative system. The two highest categories, class and subclass, give broad perspective of the suitability of map units for certain crops or pasture. These categories indicate the degree and kinds of limitations for these uses. The system evaluates soils for mechanized farming systems that produce the more common cultivated field crops, such as corn, small grains, cotton, hay, and field grown vegetables.

Capability Class

The highest category of the system is the capability class. The capability classes are groups of soils that have the same general suitability for the broad kinds of use common on farms and ranches. There are eight classes designated by Roman numerals I through VIII.

Classes I, II, III, and IV are suitable for mechanized production of common field crops if properly managed, and for production of pasture and woodland. The degree of limitation for production of cultivated crops increases progressively for class I to class IV. Limitations may affect production as well as the risk of permanent soil deterioration, as by erosion.

Classes V, VI, and VII are generally not suited to mechanized production of common field crops without special management, but are suitable for permanent cover such as grasses and trees. The severity of the soil limitations for crops increases from class V to class VII. Areas in class VIII are generally not suitable for crops, pasture, or wood products without management that is impractical. Class VIII areas may have potential for other uses, such as recreation or wildlife habitat.

Capability Subclass

The subclass identifies the dominant kind of limitation in the class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter e shows that the main limitation is risk of erosion unless a close-growing plant cover is maintained: w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

There are no subclasses in class I because the soils of this class have few limitations. The soils in class V are subject to little or no erosion, but they have other limitations that restrict their use mainly to pasture, woodland, wildlife habitat, or recreation. Class V contains only the subclasses indicated by w, s, or c.

Capability Unit

The lowest category of the capability system is the capability unit. Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Units are designated by Arabic numerals, for example IIe-2. This category is not used in all soil surveys.

Crop Yield Estimates

The average yields per acre that can be expected of the principal crops under a high level of management are presented in the following table. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, or green manure crops; and harvesting that insures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change. Absence of a yield indicates that the soil is not suited to the crop or the crop is generally not grown on the soil.

Land Capability and Yields per Acre of Crops

Franklin County Area And Part Of Somerset County, Maine

Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
AdB: Adams	3s		16.00	
AdC: Adams	4e		16.00	
AdD: Adams	6e			
AED: Adams	7e			
Colton	7e			
AFC: Adams	4e			
Croghan	2w			
AgA: Allagash	1	750.00	22.00	360.00
AgB: Allagash	2e	750.00	22.00	360.00
AgC: Allagash	3e	750.00	20.00	360.00
BeB: Berkshire	2e	800.00	22.00	330.00
BeC: Berkshire	3e	800.00	20.00	300.00
BkC: Berkshire	6s			
BkD: Berkshire	6s			
BoB: Boothbay	2w		22.00	270.00
BoC: Boothbay	3e		20.00	270.00
BpB: Brayton	4w			

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
BrB: Brayton	7s			
BrC: Brayton	7 s			
BSB: Brayton	7s			
Colonel	6s			
BTB: Brayton	7s			
Peacham	5s			
Markey	5w			
BW: Bucksport	7w			
Markey	5w			
Ca: Charles	4w			
CG: Charles	4w			
Medomak	6w			
Cornish	3w			
ChB: Chesuncook	2w	600.00	18.00	290.00
ChC: Chesuncook	3e	550.00	16.00	260.00
ChD: Chesuncook	4e	500.00		
CkB: Chesuncook	6s			
CkC: Chesuncook	6s			
CkD: Chesuncook	6s			
CLD:				

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
0.5		Bu	Tons	Cwt
CLD: Chesuncook	6s			
Telos	6s			
CnB: Colonel	3w		16.00	
CnC: Colonel	3e		14.00	
CoB: Colonel	6s			
CoC: Colonel	6s			
CPC: Colonel	6s			
Dixfield	6s			
CsB: Colton	3s		12.00	
CsC: Colton	4e			
CsD: Colton	7e			
CTC: Colton	4e			
Sheepscot	2e			
CuB: Croghan	2w		14.00	
DfB: Dixfield	2w	600.00	20.00	270.00
DfC: Dixfield	3e	550.00	18.00	240.00
DfD: Dixfield	4e	500.00	16.00	
DgB: Dixfield	6s			
DgC:				

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
DgC: Dixfield	6s			
DgD: Dixfield	6s			
DMC: Dixfield	6s			
Marlow	6s			
DTC: Dixfield	3e			
Colonel	3w			
DUD: Dixfield	6s			
Colonel	6s			
ECC: Elliottsville	6s			
Chesuncook	6s			
Telos	6s			
EMC: Elliottsville	6s			
Monson	6s			
EME: Elliottsville	6s			
Monson	6s			
EtB: Elliottsville	2e	600.00	20.00	275.00
Thorndike	2s	500.00	16.00	270.00
EtC: Elliottsville	3e	550.00	18.00	225.00
Thorndike	3e	450.00	14.00	240.00
EtD: Elliottsville	4e	500.00	16.00	175.00
Thorndike	4e	400.00		

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
Fr: Fryeburg	1		26.00	330.00
HeC: Hermon	6s			
HeD: Hermon	6s			
HMC: Hermon	6s			
Monadnock	6s			
HME: Hermon	7 s			
Monadnock	7 s			
Lc: Lovewell	2w		25.00	310.00
Cornish	3w		18.00	250.00
Ld: Lovewell	2w		23.00	290.00
Cornish	3w		18.00	250.00
LmE: Lyman	7s			
Rock Outcrop	8s			
Tunbridge	7s			
LNC: Lyman	6s			
Tunbridge	6s			
Abram	7s			
LNE: Lyman	7 s			
Tunbridge	7s			
Abram	7s			
LyC: Lyman	6s			

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
LyC: Tunbridge	6s			
Rock Outcrop	8s			
MaB: Madawaska	2w	650.00	22.00	270.00
MDB: Madawaska	2w			270.00
Allagash	2e		22.00	360.00
MeB: Marlow	2e	1000.00	22.00	330.00
MeC: Marlow	3e	1000.00	20.00	300.00
MeD: Marlow	4e	700.00	18.00	
MfB: Marlow	6s			
MfC: Marlow	6s			
MfD: Marlow	6s			
MGD: Marlow	6s			
Dixfield	6s			
MhB: Masardis	3s		14.00	250.00
MhC: Masardis	4s		12.00	230.00
MhD: Masardis	7s			
MKE: Masardis	7s			
Adams	7e			
MLC:				

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
MLC: Masardis	3s			
Sheepscot	2e			
Mm: Medomak	6w			
MNC: Monadnock	6s			
Berkshire	6s			
MNE: Monadnock	7 s			
Berkshire	7s			
MrB: Monarda	4w			
MsB: Monarda	7 s			
MTB: Monarda	7 s			
Burnham	7s			
Bucksport	7w			
MUB: Monarda	7s			
Telos	6s			
MVC: Monson	6s			
Elliottsville	6s			
Telos	6s			
Nb: Naumburg	4w			
NS: Naumburg	4w			
Searsport	5w			
NvB:				

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
NvB: Nicholville	2e		20.00	270.00
NvC: Nicholville	3e		16.00	240.00
PeB: Peacham	5s			
Brayton	7 s			
Pr: Pits	8s			
Ps: Pits	8s			
RRE: Ricker	7 s			
Rock Outcrop	8s			
RSE: Ricker	7 s			
Saddleback	7 s			
RYE: Rock Outcrop	8s			
Abram	7 s			
Lyman	7 s			
SAE: Saddleback	7 s			
Mahoosuc	8s			
Sisk	7 s			
SKD: Sisk	7s			
Surplus	7 s			
Sn: Sunday	3s		12.00	230.00
SRC: Surplus	7s			

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
SRC: Bemis	7s			
SSC: Surplus	7s			
Saddleback	7s			
Ricker	7s			
SVC: Surplus	7s			
Sisk	7s			
Sw: Swanville	4w			
SYB: Swanville	4w			
Boothbay	2w			
TeB: Telos	3w		18.00	
TeC: Telos	3e		14.00	
TfB: Telos	6s			
TfC: Telos	6s			
THC: Telos	6s			
Chesuncook	6s			
TLB: Telos	8s			
Monarda	8s			
TMB: Telos	6s			
Monarda	7s			
Monson	6s			
TOC:				

Franklin County Area And Part Of Somerset County, Maine

Map Symbol and Soil Name	Land Capability	Apples	Corn Silage	Irish Potatoes
		Bu	Tons	Cwt
TOC: Thorndike	6s			
Elliottsville	6s			
TOE: Thorndike	7s			
Elliottsville	7s			
TRC: Tunbridge	6s			
Berkshire	6s			
Dixfield	6s			
TuB: Tunbridge	2e	550.00	20.00	275.00
Lyman	3e		14.00	200.00
TuC: Tunbridge	3e	550.00	18.00	275.00
Lyman	4e		12.00	225.00
Ud: Udorthents				
Urban Land	8s			